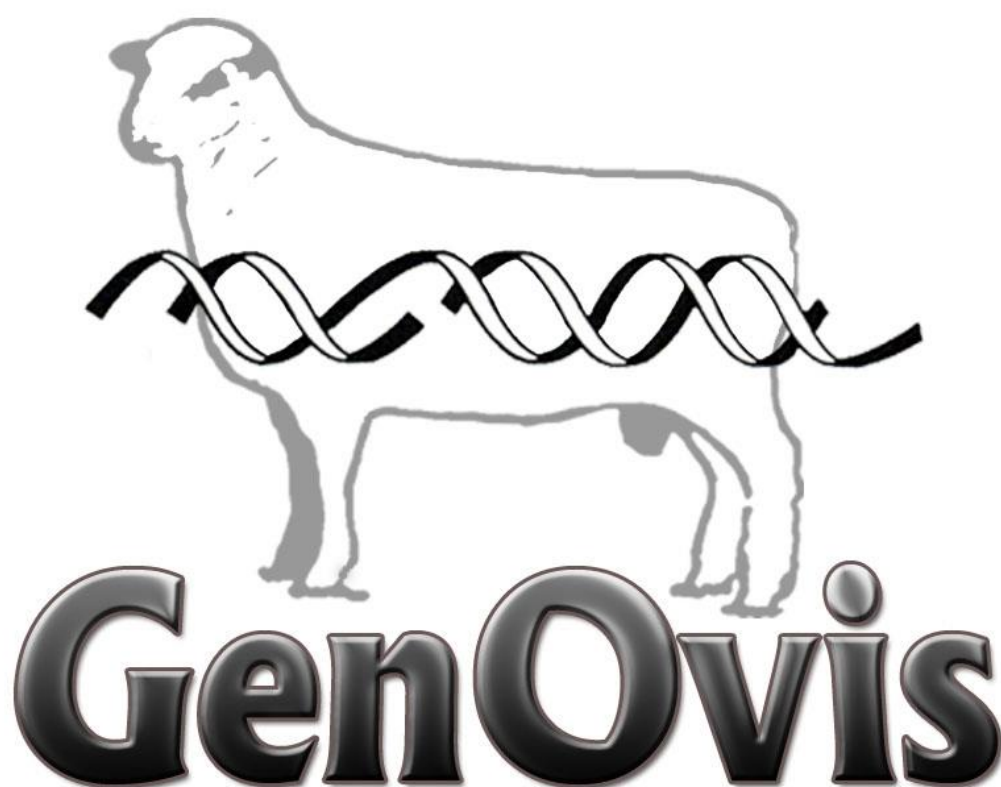


Getting Started with the New Online Program



User's Manual Canadian Sheep Genetic Evaluation System - SWA 2.0 -

March 17th 2014

Table of Contents:

1. Getting Started

1.1 Requirements	5
1.2 Logging Onto and Logout the System	5
1.3 Important Things to Remember	6
1.4 Basic Navigation of the Program	7

2. Application Tabs

2.1 Start	8
2.2 User	8
2.21 Producer Info	8
2.22 Changing Your Password	9
2.3 Animals	10
2.3.1 Search Tool (filters)	10
2.3.2 Global Search Tool	11
2.3.3 Information on an Individual Animal (certificates)	13
2.3.4 Editing Selected Animal	15
2.3.5 Entering New Animals	16
2.3.5.1 New Flocks to CSGES	16
2.3.5.2 Animal ID Basics	17
2.3.5.3 National ID	18
2.3.5.4 Entering New Animals	18
2.3.6 Editing a Group	25
2.3.7 Entering Founders	27
2.3.8 Uploading Data	29
2.3.8.1 Uploading Formats	33
2.3.8.1.1 Ewebyte Export	33
2.3.8.1.2 Ultrasound Data (CSV)	33
2.3.8.1.3 Birth Data Export (CSV)	34
2.3.8.1.4 50 Day Weight Data Export (CSV)	35
2.3.8.1.5 100 Day Weight Data Export (CSV)	35
2.3.8.1.6 Founder Data Export (CSV)	36
2.3.8.1.7 Complete Lamb Data (CSV)	37
2.3.8.1.8 Disposal (CSV)	38
2.3.9 Disposal and Transfers	39
2.4 Reports	42
2.4.1 Lamb Report (rawdata and genetic index in a management group)	43
2.4.2 Compact Lamb Report	43
2.4.3 EPD Report (Full EPD Report for Lambs in A Management Group)	44
2.4.4 Ewe Inventory Report (Inventory of Ewes)	45

2.4.5 Ram Inventory Report (Inventory of Rams)	46
2.4.6 EPD Parent Report (Full EPD Report for Parents)	46
2.4.7 Flock Evaluation Report (Flock Summary Information)	47
Export Files	
2.4.8 EPD Export	48
2.4.9 Inventory Export	49
2.4.10 Progeny Statistics Export (Progeny Stats Export)	50
2.4.11 Rawdata Report (Export Producer)	51
2.5 Mating Module	52
2.5.1 Mating Group Export File	56
2.5.2 Mating File for the Electronique Notebook	58
3. Other Useful Information	
3.1 Animal Record Validation	60
Appendices	
Appendix 1: Management Group Notion	
Appendix 2: Breed Codes	
Appendix 3: Disposal Codes and Comment Codes	
Appendix 4: Common Error Codes	
Appendix 5: How to Set the Upload File Date Format	
Appendix 6: How to Set Up the Decimal Separator	
Appendix 7: Heading Template For Upload Data File	
Appendix 8: EPD Export File Header	
Appendix 9: Conversion from CSV File to Excel File	
Appendix 10: Inventory Export File Header	
Appendix 11: Progeny Stats Export File Header	
Appendix 12: Export Producer File Header	

**Thanks to Delma Kennedy and its team for their help in the realisation of
this User's Manual.**

2.5 Mating Module

Mating module

allows calculating genetic predictions and inbreeding of offspring from cross of selected ewes and rams. It is also possible to select, in the module, animals that you don't own, but plan to purchase. Also, by using this module, you will know quickly the inbreeding values expected of the offspring from cross of the ram that you look to purchase and your breeding ewes. In that way, you will know easily if the inbreeding values of its progeny will be low or high. You can also take a look at the expected genetic evaluation of the progeny of this ram in your flock for many traits. You can do the same for the ewes and the ewe-lambs you want to purchase.

This module is easy to use:

The screenshot shows the Mating Module interface with three main sections: Rams Selection, Ewes Selection, and Traits Selection. Arrows point from these labels to their respective sections. The Rams Selection section has a 'Sires' table with columns BG, Sire, SireN, LastLamb, and Maxu. The Ewes Selection section has a 'Dams' table with columns BG, Dam, DamN, and LastLamb. The Traits Selection section has a 'Run' section with fields for Inbreeding, SMU, Trait 1, Trait 2, and Type, along with Submit and Fetch buttons. Below these sections is a 'Plan' table with columns Group, Dam, Sire, Pen, DateIn, DateOut, Method, and Pmsg. A callout box points to the Plan table with the text 'To create the export file for the electronic notebook'.

Ram Selection

1. Select the ram(s) you want to breed with your ewes.

The screenshot shows the Rams Selection interface. It features a 'Sires' table with columns BG, Sire, SireN, LastLamb, and Maxu. Above the table is a 'Groups' dropdown menu. To the right of the dropdown menu is a text box for selecting a group. The interface also includes a 'Find' button and a '+' button next to the Groups dropdown.

To select the ram(s) you owned, use the scroll menu located at the right of the word **Groups** in the **Sires** side. By selecting a management group or the current inventory, you will see it appear on the box located at the right of the scroll menu. It is possible to select more than a management group. Every time you click on a group, this

group will appear on the box (see example below).

The 'Sires' interface includes a search bar, a 'Find' button, a dropdown menu, and a '+' button. Below this, there is a 'Groups' section with a dropdown menu set to 'Current' and a text input field containing 'Current', followed by another '+' button. At the bottom, a table header is visible with columns: BG, SireN, LastLamb, and Maxu.

- When your selection is completed, click on to make the animals of this or these groups appear in the grid below.

The 'Sires' interface shows a table with the following data:

BG	Sire	SireN	LastLamb	Maxu
DP	CEPO3391RC	312673391	2011-07-31	
DP	CEPO5731SC	312735731	2012-08-28	
DP	CEPO7028WC	313217028	2012-08-22	
DP	CEPO7370UC	313217370		
DP	CEPO80050YC	313980050	2013-03-27	

- The following buttons will allow you to make a selection of the animals present on the grid:



: the animals selected (underlined in blue)* will be removed of the grid by clicking on the X.



: the animals selected (underlined in blue)* will be kept in the grid and the other ones will be removed by clicking on the Y.




: by clicking on the C button, you will clear all the grid. This will allow you to start another request.

*To underlined in blue an animal, click one time on the animal.

- You can also search a ram using the button. This search function will allow you to add rams you may not own but are interested in from mating perspective. They may be animals that you are considering for purchase. Enter all or a part of the tattoo number or the national Id in the box located at the left of the Find button and press . This may take few minutes. The first 99 animals found that satisfy the search will be shown in the select pull-down located at the right of the button.

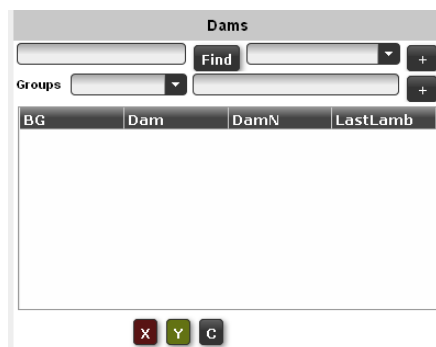
The search bar contains the text 'cepo27k'. To its right is a 'Find' button, followed by a 'WAIT' label, a dropdown menu, and a '+' button.

Thus be as specific as you can when entering the animal Id. The word **WAIT** will appear at the right of the FIND button during the search. When the search is completed, **WAIT** disappears and the pull-down button is available. Select the animal you want to add to the grid and press the  button to the right.

5. You can sort the animals present in the grid by clicking on the column headers of the grid. This will allow you to sort animals by:
 - a. **BG:** Breed Group
 - b. **Sire:** Sire Tattoo
 - c. **SireN:** Sire National ID
 - d. **Last Lamb:** Birth date of his last lamb
 - e. **MaxU:** maximum number of ewes that can be bred by this ram (for the optimal option –indicate it on the SMU box)
6. When your ram selection is completed, you can now process your ewe selection.

Ewe Selection

1. When your ram selection is completed, do the same thing for the ewes in the right grid named **Dams**.



2. The column headers of the grid are:
 - a. **BG:** Breed Group
 - b. **Dam:** Dam Tattoo
 - c. **DamN:** Dam National ID
 - d. **Last Lamb:** Last lambing date
3. When all the rams and the ewes are selected, you **must choose two traits for which you want to know the expected genetic evaluation of the progeny** of all parent combinations.

Traits Selection

The screenshot shows a web form titled 'Run'. It contains the following elements:

- Inbreeding**: A checkbox.
- SMU**: A text input field.
- Trait 1**: A dropdown menu.
- Trait 2**: A dropdown menu.
- Type**: A dropdown menu with 'Basic' selected.
- Submit**: A large black button.
- Fetch**: A large black button.

 Arrows point from callout boxes to these elements:

- Inbreeding Value** points to the Inbreeding checkbox.
- Maximum ewes per ram** points to the SMU input field.
- Traits Selection (2)** points to the Trait 1 dropdown.
- Report Type** points to the Type dropdown.
- Submit** points to the Submit button.
- Get the file** points to the Fetch button.

1. If you want to know the inbreeding value of the progeny of all parent combinations, check the Inbreeding box. **Inbreeding** ☒

When you check the Inbreeding box, it takes more time (few minutes) to get the result file.

*** Inbreeding value is optional***

2. You must select two traits in the scroll menu.

Trait 1

Trait 2

3. Select the maximum number of ewes per ram (SMU). It will apply for all selected rams when you will select the optimal type report (not available yet). You can also set the maximum number of ewes per ram manually in the column MaxU of the sires side.
4. Select the type of report you want (basic or optimal). Please note that the optimal data aren't yet available.

Type

Submit

5. Click on **Submit**. WAIT...

*The label **WAIT...** will appear at the under of the **Submit** button. You must wait in the mate tab for the computations to finish. If not, the computation will be stopped.*

- When the file will be ready, the WAIT... label will change to the name of the server file (PA....) that contains the result. To get this file, click on **Fetch**.

Submit

PA_5600191041199065443.cs

Fetch

6. You will obtain a CSV file that can be easily converted in an Excel format.

2.5.1 Mating Results Export File

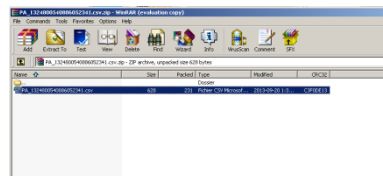
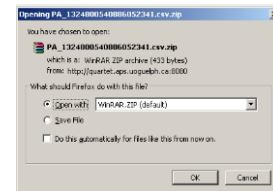
This is the file obtained from the mating module. This is a CSV file that can be easily converted in an Excel format.

- Click **Fetch** and a pop will open. Click ok.

Export is ready

OK

- A save box will appear, shown beside. Check “Open with” then OK.
- A download box will open. Double click on the name of the file to open it.



- Convert the CSV file in an Excel format (refer to [Appendix 9](#) for the details).

5. When opened in Excel, this file looks like:

	A	B	C	D	E	F	G
1			CEPO8163PC(DP)				
2			CEPO3391RC(DP)				
3			ISC	%	ISM	%	I%
4	CEPO80219WC(DP)	CEPO80240ZC(DP)	4.05	96	0.09	63.5	7.2
5	CEPO80212WC(DP)	CEPO80247ZC(DP)	3.57	95.5	-1.03	50	3.7
6	CEPO80212WC(DP)	CEPO80252ZC(DP)	3.85	96	1.49	67	10.1
7	CEPO80219WC(DP)	CEPO80256ZC(DP)	5.1	96.5	0.05	63.5	10.1
8	CEPO80219WC(DP)	CEPO80260ZC(DP)	4.79	96.5	0.29	64.5	6.9

1. In the **column A** you will find the sire of each selected ewe and its breed.
2. In the **column B** you will find the selected ewes of the Dams grid and its breed.
3. In the **column C** you will find the expected genetic evaluation of the progeny from the cross between each selected ewe of the column B and the ram of the column C for the trait 1 you have selected. Look on the case C3 to see which trait is evaluated.
4. In the **column C** you will also find the sire of the selected ram (line 1) and the selected ram itself (line 2).
5. In the **column D** you will also find the percentile related to the expected genetic evaluation of the progeny from the cross between each selected ewe of the column B and the ram of the column C.
6. In the **column E and F** you will have the same information than in the column C and D but for the second trait you have selected.
7. In the **column G** there is the inbreeding value (in percentage) of the progeny from each cross between the ewes in the column B and the ram in the column C. (I%)
8. If you have selected more than a ram, the columns H to L will be exactly the same as the columns C to G, but for the second ram. This will be the same for a third ram.

Tips: To optimize the mating planner use it is recommended to create small groups of about 60 to 70 ewes. This will allow getting quick results and avoid the system to get down. Using taller groups may crash this application and you will be obliged to select again the ewes and the rams to create a new report.

2.5.2 Mating File for the Electronique Notebook

When your mating groups are completed you can create the mating file to upload data into your electronic notebook.

1. Make appear all the rams you will need in the Sires grid.
2. Make appear all the dams that will be bred in the Dams grid.

These steps are very useful to facilitate the following ones.

3. Select a first ram by clicking on its row (will be underlined in blue)
4. Select all the ewes that will be bred by this ram in the Dams grid by clicking them.

The screenshot displays two side-by-side grids for managing mating data. The left grid is titled 'Sires' and the right grid is titled 'Dams'. Both grids have search bars at the top with 'Find' buttons and dropdown menus for 'Groups'. The 'Sires' grid has columns: BG, Sire, SireN, LastLamb, and Maxu. The 'Dams' grid has columns: BG, Dam, DamN, and LastLamb. In the 'Sires' grid, the row for Sire CEPO80292ZC (SireN 313980292) is highlighted in blue. In the 'Dams' grid, the rows for Dams CEPO80320ZC, CEPO80335ZC, CEPO80289ZC, CEPO80285ZC, CEPO80341ZC, CEPO80340ZC, and CEPO97664ZC are highlighted in blue. At the bottom of each grid, there are status indicators (1/84 for Sires, 12/311 for Dams) and three colored buttons (X, Y, C).

5. Enter the management year and group in the appropriate box.
6. Indicate the type of breeding and the PMSG dose (if used):
 - a. Natural
 - b. Photoperiod
 - c. CIDR Sponge
 - d. MGA
 - e. Ram effect
 - f. AI (Artificial Insemination)
7. Enter the pen given for the ram (you can also enter a color, a pen and a color or the ram name)
8. Enter the indate and outdate of the ram.

9. When all the information is completed, click on **Add to Plan**.

10.

Sires

Find

Groups Current

BG	Sire	SireN	LastLamb	Maxu
DP	CEPO3391RC	312673391	2011-07-31	
DP	CEPO5731SC	312735731	2012-08-28	
DP	CEPO7028WC	313217028	2012-08-22	
DP	CEPO7370UC	313217370		
DP	CEPO80050YC	313980050	2013-03-27	
DP	CEPO80058YC	313980058		
DP	CEPO80059YC	313980059		
DP	CEPO80177YC	313980177	2012-08-18	

0/84

ManYear 2014

ManGroup 1

Method 1-Natural

PMSG Dose

Pen 4 red

InDate 2013-09-20

OutDate 2013-10-25

Add to Plan

Export Plan

Sortir

OK Ready

Dams

Find

Groups 2013*2

BG	Dam	DamN	LastLamb
DP	CEPO80048YC		2011-05-23
DP	CEPO80055YC		2011-05-30
DP	CEPO80062YC		2011-05-31
DP	CEPO80065YC		2011-05-31
DP	CEPO80067YC		2011-05-31
DP	CEPO80068YC		2011-06-01
DP	CEPO80070YC		2011-06-01
DP	CEPO80072YC		2011-06-02
DP	CEPO80074YC		2011-06-02

0/40

Run

Inbreeding ☐

SMU

Trait 1

Trait 2

Type Basic

Submit

OK

Fetch

Plan

Group	Dam	Sire	Pen	DateIn	DateOut	Method	Pmsg
2014*1	CEPO80225YC	CEPO80058YC	4 red	2013-09-20	2013-10-25	1	0
2014*1	CEPO80223YC	CEPO80058YC	4 red	2013-09-20	2013-10-25	1	0
2014*1	CEPO80208YC	CEPO80058YC	4 red	2013-09-20	2013-10-25	1	0
2014*1	CEPO80125YC	CEPO80058YC	4 red	2013-09-20	2013-10-25	1	0
2014*1	CEPO80119YC	CEPO80058YC	4 red	2013-09-20	2013-10-25	1	0
2014*1	CEPO80064YC	CEPO80058YC	4 red	2013-09-20	2013-10-25	1	0
2014*1	CEPO80061YC	CEPO80058YC	4 red	2013-09-20	2013-10-25	1	0
2014*1	CEPO80052YC	CEPO80058YC	4 red	2013-09-20	2013-10-25	1	0

9

Important Notes:

*When you have clicked on **Add to Plan**, it is not possible to add ewe to the first ram. You will get an error message saying this ram is already used.

*Animals national ID must be entered in the GenOvis program to be able to use this file in the electronic notebook.

11. Repeat steps 3 to 9 for the second ram... and again for the third one...

12. When you have finished, click on **Submit**.

13. The label **WAIT...** will appear at the under of the **Submit** button. You must wait in the mate tab for the computations to finish. If not, the computation will be stopped.

14. When the file will be ready, the **WAIT...** label will change to the name of the server file (PA....) that contains the result. To get this file, click on **Fetch**.

Submit

PA_5600191041199065443.csv

Fetch

15. You will obtain a CSV file to upload in your electronic notebook.

3 Useful Information

3.1 Animal Record Validation

When an animal record save is attempted the following validations are performed:

- a. You must be properly logged into the system.
- b. The dam specified must be found in the Pedigree and her sex must be “F”.
- c. The sire specified must be found in the Pedigree and his sex must be “M”.
- d. The lamb birth date must be a valid date and must be consistent with the birth dates of the parents (see table below). This validation is not performed if a phantom sire or dam (i.e. “XXram” or “XXewe”, where XX is the breed code) is used.
- e. The breed code of the lamb is computed from the parents.
- f. The 50, 100 and ultrasound dates are validated as specified in the table.
- g. The weights and other measurements are validated.
- h. The 100 day date must be at least 28 days greater than the 50 day date.
- i. The previous lambing date for the dam must be at least 147 days prior to the current lambing.
- j. A Foster ID needs to have lambs within the past 30 days.

Ranges for Validation of Data Input

Variable	Minimum	Maximum
LambBirthDate-DamBirthDate	8 months	13 years
LambBirthDate-SireBirthDate	7 months	31 years
LambBirthDate-Day50Date	28 days	69 days
LambBirthDate-Day100Date	70 days	120 days
LambBirthDate-UltraDate	70 days	150 days
BirthWeight	1 kg	13 kg
BornAs	0	7
RaisedAs	0	6
50DayWeight	4 kg	55 kg
100DayWeight	10 kg	91 kg
UltraDayWeight	11kg	99 kg
UltraDayLoinDepth	7 mm	50 mm
UltraDayFatThickness	0 mm	15 mm
Lambing Interval	147 days	
50 day and 100 day weighing interval	28 days	

*Note that these values can be changed by the administration.